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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/591,342

08/31/2006

Jordi Torno i Blasco

5000-0199PUS1

9503

7590 09/21/2007  
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EXAMINER
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PAK, JOHN D

ART UNIT	PAPER NUMBER
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1616

MAIL DATE	DELIVERY MODE
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09/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/591,342	<b>Applicant(s)</b> TORMO I BLASCO ET AL.	
	<b>Examiner</b> JOHN PAK	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 6, 11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/06</u> . | 6) <input type="checkbox"/> Other: ____  |

Claims 1-13 are pending in this application.

Applicant is requested to provide clarification of new claim 13. Claim 13 recites applying 1-1000 g per 100 kg of seed. But claim 13 depends on claim 7, which recites applying 5-1000 g/ha (not to seed directly). Does claim 13 require applying both amounts, 1-1000 g per 100 kg of seed and 5-1000 g/ha?

Claims 6 and 11-12 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 1 is directed to a mixture. Claim 6 depends on claim 1 and reads on applying the mixture "separately, or in succession." However, a mixture means the component compounds are not in separate form, so the components cannot be applied separately or in succession. Claims 11-12 depend on claim 6 and do not cure this deficiency, so they are included in this objection.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 provides for the use of the compounds I and II, but since the claim does not set forth any steps involved in the method/process, it is unclear what

method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 10 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(1) Claim 1 recites  $R^4 = S(O)_pR^C$ , but the subscript  $p$  is not defined. Applicant is advised to avoid the use of phrases such as "one of the groups mentioned under [ ]" (emphasis added). All other claims are included herein because they all depend on claim 1, directly or indirectly.

(2) Claim 2 recites two variables that do not appear in formula IIA:  $R^4$  and  $R^5$ .

(3) Claim 3 depends on claim 1 or 2, but it recites only formula II. Note, claim 3 has formula IIA, and does not make any specific reference that formula IIA is a subgenus of formula II.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of WO 98/46607 and WO 2003/024219<sup>1</sup> in view of the acknowledged prior art.

WO 98/46607 discloses the fungicidal activity of applicant's triazolopyrimidine of formula I. See page 3, lines 5-15; Example 2 on page 20. The compound is disclosed to have enhanced systemic activity and enhanced toxicity to fungi (page 7, lines 8-11). Various solid and liquid formulations are disclosed (pages 13-17). **Combined use, including synergistic effect/use, with myriad other fungicides is disclosed** (page 17, line 7 to page 19, line 2; see in particular page 17, lines 12-13). Combining with other fungicides that have activity against diseases of cereals can have a broader spectrum of activity than when used alone (page 17, lines 14-20). Application to soil, seeds or directly onto plants is disclosed (page 19, lines 2-19). Protection of crops such as cereals, solanaceous crops, vegetables, legumes, apples, vines against phytotoxic fungi is disclosed (paragraph bridging pages 11-12). 0.5-95 wt% formulations are

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<sup>1</sup> WO 2003/024219 is a published PCT application. The counterpart U.S. national phase application was published as US 2004/0241098. This U.S. publication can therefore serve as English translation of the published PCT application. Applicant is hereby informed that although the published WO 2003/024219 is being relied on for this ground of rejection, references will be made to the English translation.

disclosed (page 12, lines 14-15). 0.01-10 kg/ha application rate is disclosed (page 15, lines 10-12).

WO 2003/024219 discloses the fungicidal activity of applicant's formula II and IIA compounds and teaches combination of said formula compounds with additional fungicides to combat fungal diseases of crops such as cereals such as barley (see in US 2004/0241098<sup>2</sup>, paragraphs 1, 8-10, 21, 23-86, 164). High activity against a broad spectrum of fungi and in particular against fungi responsible for diseases of cereals such as Ascomytes is disclosed (paragraph 21). Activity against the genus *Pyrenospora* (paragraph 152), and *Pyrenospora teres* of barley (paragraph 175) is further disclosed. Additional fungicides are structurally diverse and span all the compounds listed in The Pesticide Manual (paragraphs 48, 84-86). Concentration of the two actives can range from 0.00001-80% (paragraph 99). 1-1000 g/ha amount is disclosed for the combination of the two actives (paragraph 132). Application to various parts of plants, soil and seeds is disclosed (paragraphs 104, 108, 123, 174, 190).

Applicant acknowledges in the specification that both formula I and formula II/IIA compounds are known for their fungicidal properties, and both compound types have been combined with other active compounds (specification page 2, line 35 to page 3, line 6).

Although the cited prior art does not expressly disclose the specific combination of formula I + formula II/IIA fungicides, their combination as claimed by applicant would

have been fairly suggested. First, both formula I and formula II compounds are known fungicides, known to protect valuable crop plants from pathogenic fungi. Second, both formula I and formula II/IIA fungicides are known to be useful together in combination with other fungicides, resulting in at least increased efficacy or spectrum. Third, one having ordinary skill in the art would have been motivated to combine two such fungicides in order to obtain the benefits of both fungicides. Fourth, both fungicides have similar formulation concentration ranges and comparable application rates, and one having ordinary skill in the art would have been motivated to adjust and optimize the concentration and application rates of the two component fungicides to arrive at the mixture concentration and mixture application rates, based on the individual concentration and application rates taught by the prior art. Since formula I can be formulated as a 0.5-95 wt% formulation and formula II can be formulated as a 0.00001-80% wt% formulation, their combination in the ratio claimed by applicant in the instant claims would have been obvious.

Claims 8 and 12-13 are noted for their 1-1000 g/100 kg seed feature. Although the cited references do not specifically disclose such amount of the actives per 100 kg of seed, it must be noted that both compounds I and II/IIA are specifically taught to be applied to seeds and their field application rates are known. Therefore, one having ordinary skill in the art would have been able to arrive at suitable seed application

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<sup>2</sup> All subsequent references are to the English translation of the cited document, i.e. US 2004/0241098.

amounts via routine experimentation and optimization to practice the prior art teachings of seed treatments.

Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention and the claimed invention as a whole have been fairly disclosed or suggested by the teachings of the cited references.

In this regard, applicant's specification data has been reviewed for evidence of nonobviousness, but it must be noted that the data there falls woefully short of being commensurate in scope with that of the claimed subject matter. First, it would have been expected that II-6 would have activity against *Pyrenophora teres*, based on the teachings of WO 2003/024219, but applicant's test is very limiting in that only ineffective amounts were used to show 0% efficacy – in other words, applicant did not test II-6 at amounts for which it would have been expected to be fungicidal, and it cannot be predicted how such amounts would combine with compound I to show synergism or not show synergism. Second, only I + II-6 was tested out of thousands of structurally diverse mixtures that are readable on the claims, and even for that combination only with respect to barely against one fungus at extremely dilute concentration ranges. There is insufficient evidence to show that the data provided by applicant is sufficient to overcome the obviousness (established above) of untested mixture of thousands of other structurally diverse compounds and/or untested crops at untested ratios and concentrations. Since the claim scope is far broader than applicant's data, applicant



must provide additional evidence or arguments to establish why the limited data should be considered probative evidence of nonobviousness for the entire scope of the claimed subject matter. As nonobvious results cannot be predicted from compound to compound, in the absence of additional evidence to the contrary, applicant's evidence must be deemed insufficient. Evidence of nonobviousness, if any, must be commensurate in scope with that of the claimed subject matter. In re Kulling, 14 USPQ2d 1056, 1058 (Fed. Cir. 1990); In re Lindner, 173 USPQ 356, 358 (CCPA 1972).

For these reasons, all claims must be rejected.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to JOHN PAK whose telephone number is **(571)272-0620**. The Examiner can normally be reached on Monday to Friday from 8 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's SPE, Johann Richter, can be reached on **(571)272-0646**.

The fax phone number for the organization where this application or proceeding is assigned is **(571)273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 1616

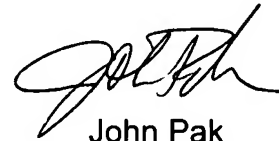
published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'John Pak', is positioned above the printed name.

John Pak  
Primary Examiner  
Technology Center 1600